

### ABSTRACT

A wireless modem contains a power inserter circuit along with the traditional modem components. The power inserter circuit isolates the modem components from DC power that is inserted on the coaxial cable to a transverter. One embodiment of the present invention provides for a wireless modem that contains separate power connections for the modem components and the transverter. Another embodiment of the present invention provides for one power connection for the wireless modem and a DC-to-DC converter for the modem component power. The power source is selected based on the power requirements of the transverter and the DC-to DC-converter converts the input voltage into the voltage level required by the modem components. By incorporating the power inserter within the modem enclosure, power cannot be accidentally inserted into the modem.